

Remarks

Claims 12 and 13 are objected to because of informalities. The claims have been corrected in accordance with the points raised by the Examiner.

Claims 1, 3, 4 and 9-13 have been rejected under 35 U.S.C. 112 second paragraph as being indefinite resulting from the use of the term "of the escalator and/or moving walk". The claims have been amended to limit the claims to recite only an escalator.

Claims 6 and 10-12 have been rejected under 35 U.S.C. 101, as the Examiner asserts that the claimed invention is directed to non-statutory subject matter.

The Examiner asserts that claim 6 has no physical structure for linking the video cameras as disclosed in the description. It is submitted that this is incorrect as both the claim and the description identify the means of linking the cameras to be in the form of a data exchange bus. See also specification page 3, lines 27-30.

With respect to claim 10, the claim has been amended to recite that the computer program is stored in a processor and that the program and processor process the stereoscopic images of the escalator and determines difference in a rectified stereo image pair. As claim 10 is believed now to be of statutory form, claim 11, dependent thereon, is similarly acceptable. Claim 12 has been amended to further recite the methodology as including determining differences in a rectified stereo image pair to detect an obstacle or person in the images. Such result is useful, concrete and tangible with respect to a real world application.

Claims 1, 2 and 4-13 have been rejected as being unpatentable and obvious over Ponsot et al '538 in view of Miura et al '596. Claim 3 has been rejected as being unpatentable over Ponsot et al '538 in view of Miura et al '596 in further view of Ahls et al '464. Responsive to the rejection, Applicants have amended independent claims 1, 10 and 12 to further clarify the nature of the invention and distinguish it from the references.

In particular, the invention as now claimed recites a monitoring system, a computer program and processor, and a methodology for the detection of obstacles and persons in each of which stereoscopic images are acquired and the differences existing in a rectified stereo image pair are determined to identify the presence of the obstacle or person. The feature of comparing the images of a stereo pair is neither taught nor suggested by the references of record.

The primary Ponsot et al '538 uses a video camera that does not acquire stereoscopic images but rather creates a "signature" for the acquired image which is compared to a reference signature previously acquired and stored in memory. See Ponsot et al column 5, lines 37-41. Thus, such methodology can be misled by changes in lighting, accidental camera shift, and the like, and thus does not provide for real time compensation for such potential problems.

Miura et al '596 merely teaches the existence of stereoscopic cameras which can enhance depth perception and image detection. However, the addition of this reference to Ponsot et al '538 does not cure the deficiency of Ponsot et al, namely that images are to be compared to a previously obtained reference image. The addition of Miura et al '596 would, at the most, lead one to compare a stereoscopic pair of images to a corresponding pair of images previously taken. Because Ponsot et al '538 deals only with comparison of an image to a previously taken reference, it is only with the hindsight derived from the present invention that one would be led to a system or procedure in which the contents of a stereoscopic pair of images be compared, one against the other, for purposes of detecting obstacles or persons appearing therein.

Further, the Miura et al '596 reference teaches the combining of stereoscopic images into a single image to be displayed on a monitor television. There is no suggestion in Miura et al itself that would lead one to compare the stereoscopic pair images to determine differences therein for purposes of identifying objects and persons and separating them from background objects. Indeed, the disclosure talks about interweaving the images from the two cameras to form a continuing image having stereoscopic properties without any analysis or comparison between the two images whatsoever. The reference cannot be combined with Miura et al '596

in a manner which teaches the present invention.

Lastly, the Ahls et al '464 reference discloses a passenger sensor positioned in a balustrade. Other than suggesting the positioning of a sensor such as a camera, it provides no teaching or suggestion whatsoever regarding the collection of stereoscopic image pair data and the comparison of the pair images as recited in the present application.

Withdrawal of all rejections and passage to allowance is solicited.

Respectfully submitted,

SCHWEITZER CORNMANN GROSS & BONDELL LLP
Customer No. 022831
Attorneys For Applicants
292 Madison Avenue - 19th Floor
New York, NY 10017
Telephone (646) 424-0770

JAB/cw

BY


JAY A. BONDELL, ESQ., REG. #28,188

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Carol L. Wood 